



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/828,628	04/05/2001	Ylian Saint-Hilaire	10559/425001/P10439	5525
20985	7590	09/29/2006	EXAMINER	
FISH & RICHARDSON, PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			NGUYEN, THANH T	
			ART UNIT	PAPER NUMBER
			2144	

DATE MAILED: 09/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/828,628	Applicant(s) SAINT-HILAIRE ET AL.	
	Examiner Tammy T. Nguyen	Art Unit 2144	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE (3) MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12, 16-26 and 31-42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12, 16-26, and 31-42 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |



UNITED STATES PATENT AND TRADEMARK OFFICE

COMMISSIONER FOR PATENTS
UNITED STATES PATENT AND TRADEMARK OFFICE
WASHINGTON, D.C. 20231
www.uspto.gov

Detailed Office Action

1. This action is responsive to the amendment filed on June 23, 2006.
2. Claims 1-12, 16-26, and 31-42 are pending.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. It is unclear and vague as to what the "predetermined reliability required" is? The examiner will interpret this limitation to mean "TCP/IP".

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-12, 16-26, and 31-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rudy et al., (hereinafter Rudy) U.S. Patent No. 6,360,252 in view of Park et al., (hereinafter Park) Publication No. 2001/0043615.
7. As to claim 1, Rudy discloses the invention substantially as claimed, Rudy teaches including a method comprising: preparing, at a first unit in a source device, first information to be transmitted to a destination across network link, wherein the source device comprises a mobile device, and wherein the destination comprises a home network [see fig.4, user's client network 220, see col.10, lines 42-64, such as wireless device, PDA...and col.1, lines 40-50, home network]; separately preparing, at a second processing unit in the source device separate from the first processing unit, second information to be transmitted to the destination, wherein the second information does not have a pre-determined reliability requirement [col.7, lines 14-22, transmitting video image, text or multimedia documents].
8. However, Rudy does not explicitly disclose with a pre-determined reliability requirement; and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link.
9. In the same field of endeavor, Park discloses (e.g., apparatus and method for transmitting...bit stream in a network). Park disclose a pre-determined reliability

requirement, [see Park page.3 paragraph 0030] (the data transmitted in the TCP at the request of transmission is IP packet); and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link [see Park page 3 paragraph (0030)] (to prevent the packet loss, the wireless terminal individually packetizes the RLP header, the IP header, the UDP or TCP header, which are added to a video bit stream to transmit to the network).

10. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Park's teachings of a mobile internet access with the teachings of Rudy to have with a pre-determined reliability requirement; and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link because it would have provided specific functions that can preventing packet loss and bit error between mobile host and home network and reducing a transmission time [see Park, page.1, paragraph 0010, and 0032].
11. As to claim 2, Rudy teaches the invention as claimed, further comprising aggregating first and second information sent from applications into the data stream (see 7, lines 14-22).
12. As to claim 3, Rudy teaches the invention as claimed, in which preparing the information includes framing the first information (see 7, lines 14-22).
13. As to claim 4, Rudy teaches the invention as claimed, in which preparing the other information includes framing the second information (see 7, lines 14-22).

14. As to claim 5, Rudy teaches the invention as claimed, in which preparing the first information includes processing the information according transmission requirement of the source device (Fig.3).
15. As to claim 6, Rudy teaches the invention as claimed, in which preparing the first information includes processing the first information according to a transmission requirement of the network link (Fig.17).
16. As to claim 7, Rudy teaches the invention as claimed, in which preparing the second information includes processing the second information according to a transmission requirement of the source device (fig.3).
17. As to claim 8, Rudy teaches the invention as claimed, in which preparing the second information includes processing the second information according to a transmission requirement of the network link (Fig.17).
18. As to claim 11, Rudy teaches the invention as claimed, further comprising, at a destination-side of the network link, removing the preparations from the first information (see col.22, lines 35-44).
19. As to claim 12, Rudy teaches the invention as claimed, further comprising, at a destination-side of the network link, removing the preparations from the second information (see col.7, lines 15-22).
20. As to claim 16, Rudy discloses the invention substantially as claimed, Rudy teaches including a method comprising: preparing, at a first unit in a source device, first information to be transmitted to a destination across network link, wherein the source device comprises a mobile device, and wherein the destination comprises a home

network [see fig.4, user's client network 220, see col.10, lines 42-64, such as wireless device, PDA...and col.1, lines 40-50, home network]; separately preparing, at a second processing unit in the source device separate from the first processing unit, second information to be transmitted to the destination, wherein the second information does not have a pre-determined reliability requirement [col.7, lines 14-22, transmitting video image, text or multimedia documents].

21. However, Rudy does not explicitly disclose with a pre-determined reliability requirement; and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link.
22. In the same field of endeavor, Park discloses (e.g., apparatus and method for transmitting...bit stream in a network). Park disclose a pre-determined reliability requirement, [see Park page.3 paragraph 0030] (the data transmitted in the TCP at the request of transmission is IP packet); and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link [see Park page 3 paragraph (0030)] (to prevent the packet loss, the wireless terminal individually packetizes the RLP header, the IP header, the UDP or TCP hear, which are added to a video bit stream to transmit to the network).
23. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Park's teachings of a mobile internet access with the teachings of Rudy to have with a pre-determined

reliability requirement; and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link because it would have provided specific functions that can preventing packet loss and bit error between mobile host and home network and reducing a transmission time [see Park, page.1, paragraph 0010, and 0032].

24. As to claim 17, Rudy teaches the invention as claimed, in which preparing the first information includes framing the first information (see 7, lines 14-22).
25. As to claim 18, Rudy teaches the invention as claimed, in which preparing the second information includes framing the second information (see 7, lines 14-22).
26. As to claim 19, Rudy teaches the invention as claimed, in which preparing the first information according to information includes processing first information according to a transmission requirement of the source device (fig.3).
27. As to claim 20, Rudy teaches the invention as claimed, in which preparing the first information includes processing the first information according to a transmission requirement of the network link (fig.17).
28. As to claim 21, Rudy teaches the invention as claimed, in which preparing the second information includes processing the second information according a transmission requirement of the source device (Fig.17).
29. As to claim 22, Rudy teaches the invention as claimed, in which preparing the second information includes processing the second information according to a transmission requirement of the network link (fig.17).

30. As to claim 23, Rudy discloses the invention substantially as claimed, Rudy teaches including a system comprising: first mechanism located at a first side of a network link and configured to prepare first information included stream information that requires reliable transmission from a source transmission across the network link, wherein the source comprises a mobile device, wherein the destination comprises a home network [see fig.4, user's client network 220, see col.10, lines 42-64, such as wireless device, PDA...and col.1, lines 40-50, home network]; separately prepare second information included in the stream that does not require reliable transmission to the destination for transmission across the network link [col.7, lines 14-22, transmitting video image, text or multimedia documents], and prepare the stream for transmission across the network link and a second mechanism located at a second side of the network and configured (see col.27, lines 34-46, and col.28, lines 49-63).
31. However, Rudy does not explicitly disclose with a pre-determined reliability requirement; and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link.
32. In the same field of endeavor, Park discloses (e.g., apparatus and method for transmitting...bit stream in a network). Park disclose a pre-determined reliability requirement, [see Park page.3 paragraph 0030] (the data transmitted in the TCP at the request of transmission is IP packet); and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link [see Park page 3 paragraph (0030)] (to prevent the

packet loss, the wireless terminal individually packetizes the RLP header, the IP header, the UDP or TCP header, which are added to a video bit stream to transmit to the network).

33. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Park's teachings of a mobile internet access with the teachings of Rudy to have with a pre-determined reliability requirement; preparations *made to the stream at the first side in order to prepare the first information and the second information included in the stream for delivery to the destination* because it would have provided specific functions that can preventing packet loss and bit error between mobile host and home network and reducing a transmission time [see Park, page.1, paragraph 0010, and 0032].
34. As to claim 24, Rudy teaches the invention as claimed, in which preparing the first information and the other information includes framing the first information and the other information (see 7, lines 14-22).
35. As to claim 25, Rudy teaches the invention as claimed, in which preparing the first information and the second information includes processing the information and the other information according to a transmission requirement of the source (Fig.17).
36. As to claim 26, Rudy teaches the invention as claimed, in which preparing the first information and the second information includes processing the first information and the second information according to a transmission requirement of the network link (Fig.13).

37. As to claim 31, Rudy discloses the invention substantially as claimed, Rudy teaches including an article comprising: a machine o readable medium which stores machine executable instructions, the instruction causing a machine to; processing reliable information is configured to require a reliability requirement for transmission (see col.7, lines 14-22); processing unreliable information; frame the unreliable information (see col.7, lines 14-21); and processing the reliable information and unreliable information to be sent on a stream of information (see col.27, lines 34-46, and col.28, lines 49-63), wherein the unreliable information is configured for a reduced processing requirement than a processing requirement for the reliable information (see col.21, lines 54-67).
38. However, Rudy does not explicitly disclose with a pre-determined reliability requirement.
39. In the same field of endeavor, Park discloses (e.g., apparatus and method for transmitting...bit stream in a network). Park discloses a pre-determined reliability requirement, [see Park page.3 paragraph 0030] (the data transmitted in the TCP at the request of transmission is IP packet).
40. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Park's teachings of a mobile internet access with the teachings of Rudy to have with a pre-determined reliability requirement because it would have provided specific functions that can preventing packet loss and bit error between mobile host and home network and reducing a transmission time [see Park, page.1, paragraph 0010, and 0032].

41. As to claim 32, Rudy discloses the invention substantially as claimed, Rudy teaches wherein the unreliable information is configured to not require a reliability requirement for transmission (see col.21, lines 54-67). However, Rudy does not explicitly disclose with a pre-determined reliability requirement.
42. In the same field of endeavor, Park discloses (e.g., apparatus and method for transmitting...bit stream in a network). Park discloses a pre-determined reliability requirement, [see Park page.3 paragraph 0030] (the data transmitted in the TCP at the request of transmission is IP packet).
43. Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Park's teachings of a mobile internet access with the teachings of Rudy to have with a pre-determined reliability requirement because it would have provided specific functions that can preventing packet loss and bit error between mobile host and home network and reducing a transmission time [see Park, page.1, paragraph 0010, and 0032].
44. As to claim 33, Gross teaches the invention as claimed, wherein framing the reliable information comprises preparing the reliable information for transmission using a transmission protocol (see col.22, lines 35-44).
45. As to claim 34, Rudy teaches the invention as claimed, wherein the unreliable information is configured to use a lower amount of processing resource than the reliable information (fig.17).
46. As to claim 35, Rudy teaches the invention as claimed, wherein the processing of the reliable information comprises: maintaining an order of framing (see col.7, lines 14-

22); forwarding the unreliable information to an unreliable packet fragmenter (see col.21, lines 54-67; and forwarding frame reliable information and control information associated with the framed reliable information to lower layer processing unit for the unreliable information processing (fig.13).

47. As to claim 36, Rudy teaches the invention as claimed, wherein the unreliable information processing comprises: framing the processed unreliable information, control information associated with processed unreliable information, and unreliable packet fragments; and forwarding the framed processed unreliable information, control information associated with the framed reliable information to a master stream processing unit (see col.7, lines 14-22).
48. As to claim 37, Rudy teaches the invention as claimed, further comprising instruction causing the machine to: process the stream of information; and send the stream of information to the home network (see fig.13).
49. As to claim 38, Rudy discloses the invention substantially as claimed, Rudy teaches including an article comprising: a machine readable medium which stores machine executable instruction, the instruction causing a machine to: receive a stream of information comprising reliable information and unreliable information (see col.7, lines 14-22, and col.22, lines 35-44); handle the unreliable information, wherein handling the unreliable information comprises: collecting unreliable information packets; deframing the unreliable information packets and forwarding the unreliable information packets and control information associated with the unreliable information to a first destination in the home network (see fig.13); and handling the

reliable information, wherein handling the reliable information comprises: collecting reliable information packets (see col.7, lines 14-22, and col.21, lines 54-67); deframing the reliable information packets and forwarding the reliable information associated with the reliable information to a second destination in the home network (fig. 13).

50. However, Rudy does not explicitly disclose with a pre-determined reliability requirement; and preparing, at a stream processing unit in the source device, a data stream comprising the first and the second information to be transmitted across the network link.
51. In the same field of endeavor, Park discloses (e.g., apparatus and method for transmitting...bit stream in a network). Park discloses a pre-determined reliability requirement, [see Park page.3 paragraph 0030] (the data transmitted in the TCP at the request of transmission is IP packet). Accordingly, it would have been obvious to one of ordinary skill in the networking art at the time the invention was made to have incorporated Park's teachings of a mobile internet access with the teachings of Rudy to have with a pre-determined reliability requirement because it would have provided specific functions that can preventing packet loss and bit error between mobile host and home network and reducing a transmission time [see Park, page.1, paragraph 0010, and 0032].
52. As to claim 39, Rudy teaches the invention as claimed, wherein the forwarding of the unreliable information occurs prior to the forwarding of the reliable information (see col.21, lines 54-67).

53. As to claim 40, Rudy teaches the invention as claimed, wherein the forwarding of the unreliable information occurs prior to the forwarding of the unreliable information (see col.22, lines 35-44).
54. As to claim 41, Rudy teaches the invention as claimed, wherein the handling of the unreliable information is not dependent on the handling of the reliable information (see col.21, lines 35-44, and col.22, lines 54-67).
55. As to claim 42, Rudy teaches the invention as claimed, wherein the unreliable information is configured to required a lower amount of handling operations than the reliable information (fig.17).

Response to Arguments

56. Applicant's arguments filled on June 23, 2006 have been fully considered, however they are not persuasive because of the following reasons:
57. In response to the applicant's argument about the rejection 35 U.S.C. 112, second paragraph to claims 1, 16, 23, 31, 32, and 38. The Patent Examiner maintain the rejection because Examiner is still unclear what applicant explains the specification in page 5 paragraph 70 and fig.2-7. The examiner can not find anywhere in the specification that disclosed a limitation "pre-determined reliability requirement". The applicant is requested to provide a complete and clear explanation for the above limitation.
58. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e.,

“splitting up the framing and processing work between information with a reliability requirement and information without a reliability requirement”) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

59. In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have provided specific functions that can preventing packet loss and bit error between mobile host and home network and reducing a transmission time [see Park, page.1, paragraph 0010, and 0032].
60. Therefore, the Examiner asserts that cited prior arts teach or suggest the subject matter broadly recited in independent claims 1, 16, 23, 31, and 38. Claims 2-12, 17-22, 24-26, 32-37, and 39-42 are also rejected at least by the virtue of their dependency on independent claims and by other reasons set forth in the previous office action.
61. Accordingly, claims **1-12, 16-26, and 31-42** are respectfully rejected.

Conclusion

62. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

63. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammy T. Nguyen whose telephone number is 571-272-3929. The examiner can normally be reached on Monday - Friday 8:30 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *William Vaughn* can be reached on 571-272-3922. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

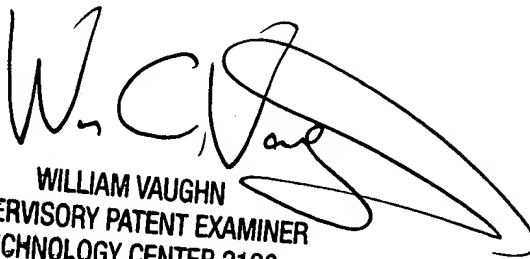
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2144

If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

TTN

September 7, 2006


WILLIAM VAUGHN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100